GN Docket No.25-133

POC GMRS rule clarification,

The rules and definitions pertaining to utilizing digital to analog FM technologies are not real clear and I am seeking clarification regarding the following scenario.

Utilizing POC (Push to talk over cellular) data radios bridged to an analog GMRS repeater. The POC's do not fall into the definition of network, linking, Clear Communications or real time communications as defined by the FCC. There are multiple questions regarding this, and I hope to lay them all out to the best of my ability get the best clarification I can.

The scenario would be users utilizing a POC radio with a license validated group meaning that users in that group hold a valid GMRS license, the users would access a dedicated server through digital means, not a phone system as currently specified and defined by the FCC.

Once the signal reaches the bridge a conversion takes place from digital communications to analog FM just as a standard radio accessing the repeater would. The bridge, a radio would be under physical control and not operated remotely.

One of the questions that needs clarification is, what is the point of "Clear Communications", is it the point that the data stream is initiated or the point that the conversion from digital to analog FM takes place. This I feel is crucial point of the transmit chain since "Clear Communication" does not take place until conversion to FM happens and vice versa. The way I understand "Clear Communications" is for example FM to FM not digital to FM it would be unintelligible.

I would also like to note in part 47 points out that GMRS or FRS devices ARE authorized to transmit data to include location and "Text Messages" essentially creating a digital network if there is more than one device. This creates confusion when part 47 states no network connections are allowed on GMRS systems or repeaters. Outside mesh networks could decipher and decode the digital location or text message essentially expanding the network between the two devices.

A ruling clarification has already been rendered on linking multiple GMRS repeaters, this is not applicable since there is no repeater linking or additional spectrum use either from the end user or repeater associated with this approach.

I would also like to point out that only licensed users in the designated community would have access to the system, meaning that NOT anyone with a POC radio would be able to access the Repeater as in a linked repeater scenario.

According to the following rules:

§ 95.1749 GMRS network connection.

Operation of a GMRS station with a telephone connection is prohibited, as in § 95.349. GMRS repeater, base and fixed stations, however, may be connected to the public switched network **or other networks for the sole purpose of operation by remote control pursuant to § 95.1745.**

§ 95.1731 Permissible GMRS uses.

The operator of a GMRS station may use that station for two-way plain language voice communications with other GMRS stations and with FRS units concerning personal or business activities.

(d) Digital data. GMRS hand-held portable units may transmit digital data containing location information, or request location information from one or more other GMRS or FRS units, or containing a brief text message to another specific GMRS or FRS unit

95.1733 Prohibited GMRS uses.

(8) Messages which are both conveyed by a wireline control link and transmitted by a GMRS station;

This brings into definition what is the legal definition of a network and at what point does clear communications take place.

The FCC does not explicitly define "network" in a single, clear statement, but based on its regulations and interpretations, a network is generally understood as a system of interconnected communication points, like radio stations, television channels, or internet service providers, that can transmit signals or data across a large area, falling under the FCC's jurisdiction for regulating interstate and international communications via radio, television, wire, satellite, and cable.

The follow up definition would be the definition of interconnectivity by the FCC.

The Federal Communications Commission (FCC) defines "interconnected VoIP service" as a service that allows users to make and receive calls to the public

switched telephone network (PSTN). Interconnected VoIP services use Voice over Internet Protocol (VoIP) technology.

According to this definition a direct example of VOIP was given which clearly states switched telephone network and I present no contest on this, but by mere definition this does not apply to a POC bridge to a GMRS repeater. The POC is digital stream, controlled by a closed server which directs a digital stream to a bridge device facilitating the conversion to FM. Just to point out another perspective on network, would the GMRS repeater with the users not also be considered a network or defined as such?

Although the broad definition of network could be applied to a POC radio system, I believe that at the point of conversion utilizing the “Clear Communications” principal when the conversion and transmission to the repeater takes place it would be no different than a local user accessing the system as intended and does not apply. The possibilities this system brings to communities utilizing a GMRS repeater are multifold coupling utility with safety and maintaining the integrity of the allocated frequency spectrum.

The antiquated approach to GMRS management is falling short of market technologies and advancements in communication and therefore the rules preventing network linking in this case should be removed, but repeater linking should remain in tact due to the additional bandwidth used. By removing this barrier it removes the telecom monopolies in place only being able to get POC type of service with the purchase of a cell phone and service.

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It seems that the FCC governs by “Staff Opinion” (see FCC response below) because no clarification or direct definition to my rule clarification could be given. This is a broad stroke interpretation of the word “network” for blanket enforcement, the word “network” should be removed and clearly define in the rules repeater linking is prohibited.

FCC Response:

Case Id: HD0001478045

Summary: Rule Clarification

Description: The rules and definitions pertaining to utilizing digital to analog FM technologies are not real clear and I am seeking clarification regarding the following scenario.

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Good afternoon,

The rule states that stations may only be connected to the PSTN or other networks for the sole purposes of operation by remote control. Staff opinion is that using any network, including digital cellular networks to carry messages to be transmitted on GMRS channels is prohibited.

Please note that there may be other rules that impact the operations described. The type of station that you describe does not appear to meet the definition of a repeater station when operating in this capacity(see 95.303). Further, automatic control of stations operated in the GMRS is generally prohibited unless that station meets the definition of a repeater station under the rules (see 95.1747 and 95.347).

If you have any further questions or need additional information, please submit a help request at https://www.fcc.gov/wtbhelp or call the FCC Licensing Support Center at (877) 480-3201.

Sincerely,

FCC Licensing Support Center
8:00 AM – 6:00 PM ET, M – F

Ref:MSG17140595